



# UNWELCOME MATS

## KEEP BEARS WILD



### What is an Unwelcome Mat?

An unwelcome mat uses nails and plywood placed in front of doorways, windows, sheds and other openings to discourage black bears from entering. Unwelcome mats cause instant pain if a bear attempts to walk over them to reach a door or window but do no permanent damage to the pads of bear's feet if properly constructed. The objective is to cause enough pain for a bear to abandon its approach - not to injure the bear. Removing food sources/attractants and implementing an unwelcome mat will deter bears from areas you don't want them.

### How to Build an Unwelcome Mat

Unwelcome mats must be large enough to keep a bear from leaning to reach a door or window. Ideally they should extend past the sides of the door or window a minimum of two feet. A 4' x 4' sheet of plywood will protect a single doorway; a 4' x 8' will protect most patio and double doors and windows.

**Black bears can be seriously injured by nails that are too long or spaced too far apart so please make sure you carefully follow the directions below.**

Materials Needed: plywood, hammer, nails, ruler, pencil, rebar or other material for securing

- Use a piece of plywood that will extend 2 feet past the opening on either side.
- Use a ruler to draw a line 1 inch in from each edge and then make a mark every 2 inches along each line. Use these lines to draw a grid.
- Place a 1 inch finishing nail at each intersection in the grid. The nails should only extend a maximum of  $\frac{3}{4}$  of an inch. Nails should all be spaced 2 inches apart.
- Once all the nails are hammered into the board, place the finished mat at the doorway or opening and attach it in place so that the bear cannot push or flip the mat over. You may want to pre-drill holes in the corners if securing with rebar.



Living with Bears Handbook



Boards used instead of plywood in front of a glass door

Jim Tiffin



Finished 4 x 4 mat for bluebird box

Fred Frenzel VDGIF



Mat around a bluebird box. Secured at corners with rebar



FWCC



Rebar in corners used to secure mat to ground

## How to Build an Electric Unwelcome Mat

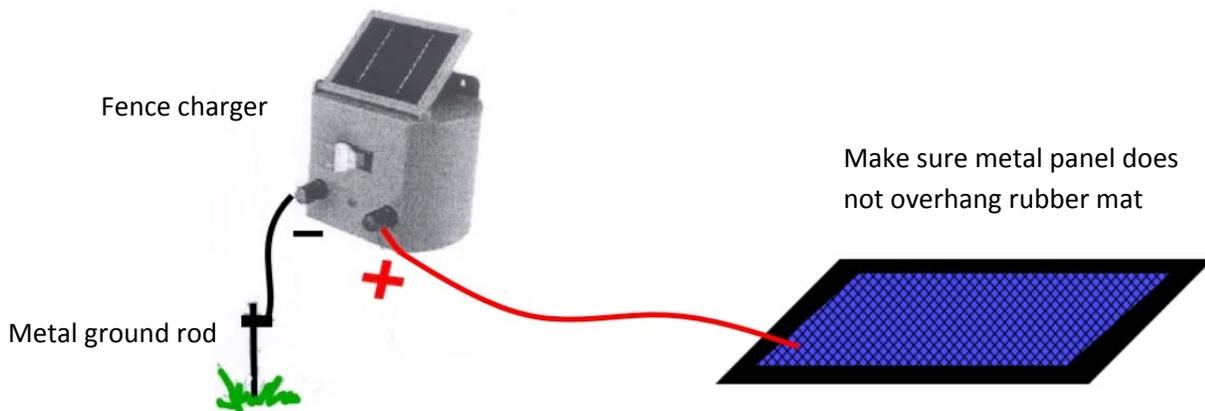
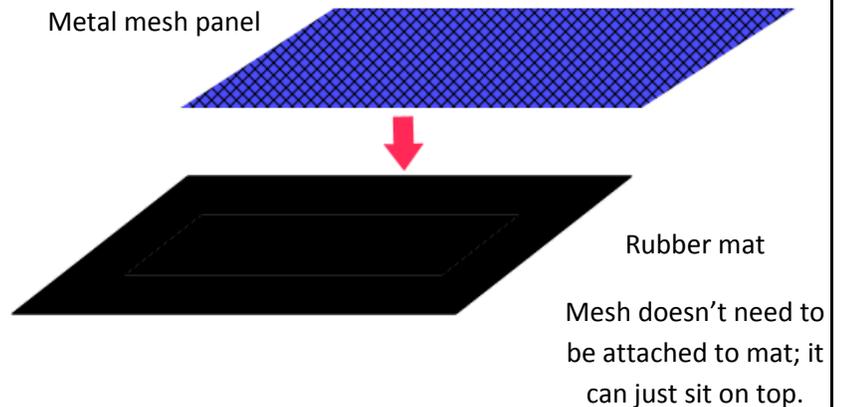
### Materials needed:

- Galvanized metal mesh panel or hardware cloth
- Thick rubber mat or roll (stall mats and 3/8 rubber rolls are typically sold at farm stores)
- High voltage fence charger with minimum rating of 0.7 joules.
- 10 to 12 gauge wire and alligator clips for attachment
- Metal ground rod – 3 feet minimum.



Kevin Wright

1. Cut mesh wire panel to appropriate size. 4'x4' works well in front of single doors or windows.
2. Cut rubber mat 1" to 2" bigger on all sides than wire mesh panel so panel doesn't hang over mat edge.
3. Attach the fence charger as per instructions.
4. Drive ground rod at least 2 feet into soil near where mat will be.
5. Run one wire from the negative (black) charger terminal to the ground rod.
6. Run a second wire from the positive (red) charger terminal to the wire panel.



For the mat to deliver a shock, an animal has to have at least one point of contact with the earth or soil next to the mat. So if a pet landed fully on the mat without simultaneous contact with the adjacent ground (soil), no shock would be delivered.

Tip: Keeping the soil moist around ground rod will help maximize charger effectiveness.

For more details on electric fence design and specifications for bears see VDGIIF publication "Electric Fencing for Bears": [www.dgif.virginia.gov/wildlife/bear](http://www.dgif.virginia.gov/wildlife/bear). Also reference: Living with Bears Handbook: <http://livingwithbears.com/>.